

[0026] Referring to Fig. 3, control of a print zone dampening is accomplished by computer 32 performing the flowcharted algorithm. Starting at 400, an unprinted white patch is measured at step 401. Paper brightness variations will provide a difference of about 0.03 to 0.1 D, typically about equally in the red, green, and blue channels of the camera; larger drops in brightness than this indicate extraneous ink on the substrate, typically caused by a dryup. (D is optical density, which is defined as the negative log of the ratio of the reflectance of printed versus unprinted substrate.) Alternatively, the random pattern of the dryup is detected by the resultant high standard-deviation (high noise or large variation) of the brightnesses of the pixels within the unprinted patch. As defined in this disclosure 'tone' refers to the percentage of oleophilic coating placed on a portion of the plate prior to printing, while 'density' relates to the resultant ink application to the substrate, which may vary due to ink and water supply variations.